

# Notice of Allowability

Application No.

10/710,496

Examiner

Justine R. Yu

Applicant(s)

DENYER ET AL.

Art Unit

3751

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/3/2006.
2. ☒ The allowed claim(s) is/are 2-5 and 7-10 (renumbered as 1-8).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

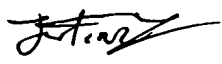
\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
Justine R Yu  
SPE  
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### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Donald J. Harrington on 9/14/06.

The application has been amended as follows:

In claim 10, line 14 "controller" was changed to --oscillator--; and in line 18, "oscillator" was changed to -- controller--.

2. The following is an examiner's statement of reasons for allowance: the prior art of record does not disclose the specific structure and method steps as recited in the claims such that in claim 2, a method for stabilizing operating characteristics of a solenoid-operated fluid pressure control valve system in a control valve circuit including applying a base actuating current, establishing an electrical dither frequency, changing electrical dither frequency at regulated pressure values within a precalibrated range, changing the dither frequency comprising interrupting it when regulated pressure values are within the precalibrated range. Regarding claim 3, the prior art of record does not disclose the specific method steps and functional recitation such that a method comprising changing the electrical dither frequency at regulated pressure values within a precalibrated range, the controlled pressure being changed by the valve assembly as the base actuating

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current is varied in accordance with a precalibrated transfer function, and variations in control valve system compliance relative to the transfer function effecting a hysteresis, and the hysteresis being moderated when regulated pressure values are within the precalibrated range as the electrical dither frequency is changed. Regarding claim 5, the prior art of record does not disclose the specific steps such that the electrical dither frequency being established at a value that exceeds a natural frequency for the solenoid actuator, the step of changing the electrical dither frequency comprising adding to the electrical dither frequency a precalibrated frequency valve when regulated pressure values are within the precalibrated range. Regarding claim 7, the prior art of record does not disclose the claimed structure and functional recitation such that a control valve system having means for applying a solenoid current and means for changing the dither frequency at precalibrated range of regulated pressure values corresponding to solenoid regulator valve dynamic instability. Regarding claim 10, the prior art of record does not disclose the specific structure and functional recitation such that a control valve system having a dither frequency oscillator, and a dither frequency controller communicating with the dither frequency oscillator for changing the dither frequency in a precalibrated range of regulated pressure values.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justine R. Yu whose telephone number is (571) 272-4835. The examiner can normally be reached on Monday-Thursday from 8:30 am to 6:00 pm. The examiner can also be reached on alternate Fridays.

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The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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SPE

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